

## Patent Abstracts of Japan

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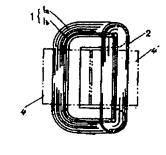
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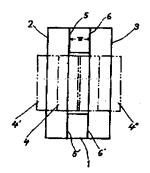
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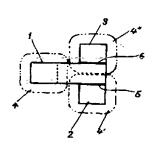
TITLE

THREE PHASE CONFRONTING TYPE

**TRANSFORMER** 







ABSTRACT :

PURPOSE: To prevent breakdown of insulation between winding layers and vibration noise of core of a three phase confronting type transformer by a method wherein the confronting faces between "ko" (Japanese: katakana, 2533)-shaped core legs and two linear type core legs consisting of respectively double loop type laminated cores are fixed through a magnetic liquid making gaps at the confronting parts to the minimum.

CONSTITUTION: Both the upper and lower end winding layer faces on the before and behind sides of the core legs 1 being deformed into the

"ko"(Japanese: katakana, 2533)-shape and being heat treated lumping the double loop type laminated cores consisting of elemental materials of two large and small silicon steel belts 1a, 1b having necessary width W and having directional property, and both the upper and lower end winding layer faces of two elliptic type core legs 2, 3 being deformed double loop type laminated cores into the linear type and being heat treated, are made to interlink and to confront with each other respectively. At this time, the necessary windings 4, 4', 4" are wound on the core legs 1, 2, 3, and the magnetic liquid 5, 5' and 6, 6' consisting of carbonyl iron powder and thermosetting resin, for exmaple, and having large adhesion are adhered to the confronting faces between the core legs 1 and the core legs 2, 3 to join them, and the gaps at the joining parts are held at the minimum values through the magnetic liquid. Accordingly an exciting current and an exciting inrush current can be reduced, and breakdown of insulation between the winding layers and vibration noise to be gnerated by magnetic attraction can be prevented.

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